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### **REMARKS**

Claims 1-18 are all the claims presently pending in the application. Claims 1-5 have been amended to more particularly define the invention. Claims 6-18 have been added.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Applicant gratefully acknowledges the Examiner's indication that claim 4 would be allowable if rewritten in independent form. Applicant submits, however, that all of the claims are allowable.

Claims 1-2 stand rejected under 35 U.S.C. § 102(e) as being allegedly unpatentable over Koide et al. (U. S. Patent No. 6,870,566). Claims 1 and 3 stand rejected under 35 U.S.C. § 102(b) as being allegedly unpatentable over Hasegawa et al. (U. S. Patent No. 5,838,373).

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Koide in view of Smitt (U. S. Patent No. 5,502,578).

These rejections are respectfully traversed in view of the following discussion.

#### **I. THE CLAIMED INVENTION**

An exemplary aspect of the claimed invention (e.g., as recited, for example, in claim 1), is directed to An electronic camera in which an analog signal output from an image pickup device is analog-to-digital-converted (AD-converted) and digital processing is performed on the AD-converted signal on the basis of a basic operating clock. The camera includes a clock change device for changing the frequency of the basic operating clock, and a control device for controlling the clock change device such that the frequency of the basic operating clock is reduced at the time of AD conversion of a still image output from the image pickup device (Application at Figures 3-5; page 8, line 16-page 9, line 5).

In a conventional camera, a noise source is produced at the time of writing and the noise

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is mixed in the analog signal output from the image sensor, resulting in degradation of image quality (Application at page 1, lines 15-18).

An exemplary aspect of the claimed invention, on the other hand, includes a control device for controlling the clock change device such that the frequency of the basic operating clock is reduced at the time of AD conversion of a still image output from the image pickup device (Application at Figures 3-5; page 8, line 16-page 9, line 5). This may allow the claimed invention to at least reduce an influence of noise on a photographed still image while minimizing a reduction in processing capacity (Application at page 9, lines 9-12).

## II. THE ALLEGED PRIOR ART REFERENCES

### A. Koide

The Examiner alleges that Koide teaches the invention of claims 1 and 2. Applicant submits, however, that there are features of the claimed invention that are not taught or suggested by Koide.

Koide discloses an image sensing system for sensing an image and converting the image into image signals with a controlled operating rate (Koide at Abstract).

However, Applicant submits that Koide does not teach or suggest "*a control device for controlling the clock change device such that the frequency of the basic operating clock is reduced at the time of AD conversion of a still image output from the image pickup device*", as recited, for example, in claim 1 (Application at Figures 3-5; page 8, line 16-page 9, line 5). As noted above, this may allow the claimed invention to at least reduce an influence of noise on a photographed still image while minimizing a reduction in processing capacity (Application at page 9, lines 9-12).

Clearly, this feature is not taught or suggested by Koide.

Indeed, the Examiner attempts to rely on col. 17, lines 23-27 in Koide to support his position. This is clearly unreasonable.

In fact, this passage simply refers to Figure 9 and teaches that the system controller 14 and the frequency divider 17 construct control means for arbitrarily controlling the frequency of a

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reference clock which enters the timing generator (TG) 4 and the synchronizing signal generator (SSG) 18 and serves as a reference clock for generating timing signals and synchronizing signals. Moreover, in col. 17, lines 27-37, Koide teaches that the frequency of the reference clock is decreased "when the illuminance of the optical image formed on the image sensing device 3 is low", and in col. 17, lines 38-50, Koide teaches that the frequency of the reference clock is decreased if the luminance level of an object is less than a predetermined value.

That is, nowhere in these passages or anywhere else does Koide mention a time of AD conversion of a still image, and certainly does not mention changing a clock frequency at the time of AD conversion of a still image. Thus, even assuming that Koide teaches decreasing a frequency of the reference clock, nowhere does Koide teach or suggest controlling a clock change device such that the frequency of the basic operating clock is reduced **at the time of AD conversion of a still image output from the image pickup device**, as in the claimed invention.

Therefore, Applicant submits that there are features of the claimed invention that are not taught or suggested by Koide. Therefore, the Examiner is respectfully requested to withdraw this rejection.

#### **B. Hasegawa**

The Examiner alleges that Hasegawa teaches the invention of claims 1 and 3. Applicant submits, however, that there are features of the claimed invention that are not taught or suggested by Hasegawa.

Hasegawa discloses an imaging circuit having an interlaced and non-interlaced mode. The circuit includes a solid state imaging device, an A/D converter and a driving unit for supplying clock signals to the imaging device and the A/D converter. When the imaging device is selected to a first mode, a clock signal having a first repetitive frequency is transmitted to the imaging device and another clock signal having a lower frequency is transmitted to the A/D converter, and when the imaging device is selected to a second mode, a clock signal having a predetermined repetitive frequency is transmitted to the imaging device and the A/D converter (Hasegawa at Abstract).

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However, Applicant submits that Hasegawa does not teach or suggest "*a control device for controlling the clock change device such that the frequency of the basic operating clock is reduced at the time of AD conversion of a still image output from the image pickup device*", as recited, for example, in claim 1 (Application at Figures 3-5; page 8, line 16-page 9, line 5). As noted above, this may allow the claimed invention to at least reduce an influence of noise on a photographed still image while minimizing a reduction in processing capacity (Application at page 9, lines 9-12).

Clearly, this feature is not taught or suggested by Hasegawa.

Indeed, the Examiner attempts to rely on col. 7, lines 30-44 and Figure 1 in Hasegawa to support his position. This is clearly unreasonable.

In fact, this passage simply teaches that when the imaging device is selected to a first mode, the driving unit 121 drives the imaging device 110 with the first repetitive frequency and selects the first output control circuit 121a, and when the imaging device is selected to a second mode, the driving unit 121 drives the imaging device 110 with the second repetitive frequency and selects the second output control circuit 121b.

That is, nowhere in these passages or anywhere else does Hasegawa mention a time of AD conversion of a still image, and certainly does not mention changing a clock frequency at the time of AD conversion of a still image. Thus, even assuming that Hasegawa teaches driving the imaging device with a first or second frequency, nowhere does Hasegawa teach or suggest controlling a clock change device such that the frequency of the basic operating clock is reduced **at the time of AD conversion of a still image output from the image pickup device**, as in the claimed invention.

Therefore, Applicant submits that there are features of the claimed invention that are not taught or suggested by Hasegawa. Therefore, the Examiner is respectfully requested to withdraw this rejection.

### C. Smitt

The Examiner alleges that Koide would have been combined with Smitt to form the

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invention of claim 5. Applicant submits, however, that these alleged references would not have been combined and even if combined, the alleged combination would not teach or suggest each and every element of the claimed invention.

In particular, Applicant respectfully submits that these alleged references are unrelated. Indeed, no person of ordinary skill in the art would have considered combining these disparate references, absent impermissible hindsight.

In fact, Applicant submits that the references provide no motivation or suggestion to urge the combination as alleged by the Examiner. Indeed, these references clearly do not teach or suggest their combination. Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has failed to make a prima facie case of obviousness.

Moreover, Applicant submits that neither Koide, nor Smitt, nor any alleged combination thereof teaches or suggests *"a control device for controlling the clock change device such that the frequency of the basic operating clock is reduced at the time of AD conversion of a still image output from the image pickup device"*, as recited, for example, in claim 1 (Application at Figures 3-5; page 8, line 16-page 9, line 5). As noted above, this may allow the claimed invention to at least reduce an influence of noise on a photographed still image while minimizing a reduction in processing capacity (Application at page 9, lines 9-12).

Clearly, this feature is not taught or suggested by Smitt.

Indeed, Smitt simply discloses an optical scanner having a variable resolution.

That is, nowhere does Smitt mention changing a clock frequency at a time of AD conversion of a still image. Thus, Smitt certainly does not teach or suggest controlling a clock change device such that the frequency of the basic operating clock is reduced **at the time of AD conversion of a still image output from the image pickup device**, as in the claimed invention.

Therefore, Applicant submits that these alleged references would not have been combined and even if combined, the alleged combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

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### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-18, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,



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### CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the foregoing Amendment was filed by facsimile with the United States Patent and Trademark Office, Examiner Nicholas G. Giles, Group Art Unit # 2622 at fax number (571) 273-8300 this 10th day of December, 2007.



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